

### **ABSTRACT**

The cache memory in the present invention includes a C flag setting unit 40 which adds, to each cache entry holding line data, a cleaning flag C indicating whether or not a write operation will be performed hereafter, and a cleaning unit 39 which writes back, to the memory, line data of a cache entry that has been added with a cleaning flag C indicating that a write operation will not be performed, and has been set with a dirty flag D indicating that the cache entry has been written into.